

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for controlling concurrency of access to data in a database system, the method comprising:

partitioning a table in the database system into a plurality of partitions;

receiving a lock request for access to data in the database system, the lock request being a request for a page lock or a row lock for a corresponding row or page in the database system containing the data;

identifying a partition of the plurality of partitions that contains the row or the page in the database system containing the data;

associating the lock request with a partition lock on the partition that contains the row or the page in the database system containing the data, the partition lock locking the partition at a lock state that permits serialized access to data in the partition; and

serially accessing the data in the partition using the partition lock.

2. (Previously Presented) The method of claim 1, further comprising:

responsive to the data being committed at a time of receiving the lock request, accessing the data without using the partition lock.

3. (Currently Amended) The method of claim 1, wherein ~~accessing the data using the partition lock includes serializing access to the partition at a~~ the lock state to protect protects against interference in the form of updates to the partition.

4. (Currently Amended) The method of claim 3, wherein ~~serializing access to~~ serially accessing the data in the partition includes permitting lock requests access to the partition that are compatible with the lock state.
5. (Currently Amended) The method of claim 1, wherein serially accessing the data using the partition lock comprises an application accessing the data through a single database system.
6. (Currently Amended) The method of claim 1, wherein serially accessing the data using the partition lock comprises a second database system in a data-sharing environment accessing the data.
- 7-8. (Cancelled)
9. (Previously Presented) The method of claim 1, wherein the lock request is a request for a shared lock.
10. (Previously Presented) The method of claim 1, wherein the lock request is a request for an exclusive lock.
11. (Previously Presented) The method of claim 4, further comprising:
receiving a lockmax value;

accumulating for an application, a number of lock requests for access to the data in the database system by the application;

comparing the number of lock requests with the lockmax value; and

when the number of lock requests equals the lockmax value, escalating the lock state.

12. (Currently Amended) A database management system implemented in a digital computer system, the database management system configured to manage access to data in a database system, the database management system comprising:

a database system component to partition a table in the database system into a plurality of partitions; and

a data manager configured to:

receive a lock request for access to data in the database system, the lock request being a request for a page lock or a row lock for a corresponding row or page in the database system containing the data;

identify a partition of the plurality of partitions that contains the row or the page in the database system containing the data;

associate the lock request with a partition lock on the partition that contains the row or the page in the database system containing the data, the partition lock locking the partition at a lock state that permits serialized access to data in the partition; and

serially access the data in the partition using the partition lock.

13. (Previously Presented) The database management system of claim 12, wherein the data manager is further configured to access the data without using the partition lock responsive to the data being committed at a time the data manager received the lock request.

14. (Currently Amended) The database management system of claim 12, ~~further comprising a lock manager configured to grant serialized access to the partition at a~~ wherein the lock state to protect protects against interference in the form of updates to the partition.

15. (Currently Amended) The database management system of claim 14, wherein the ~~lock~~ data manager serializes access to the partition by granting lock requests on the partition that are compatible with the lock state.

16. (Currently Amended) The database management system of claim 14, wherein the ~~lock~~ data manager is coupled to a plurality of database systems of a data-sharing environment.

17. (Previously Presented) The database management system of claim 12, wherein the lock request is from an application coupled to the database management system.

18. (Previously Presented) The database management system of claim 15, wherein the database manager is further configured to:

accumulate for an application a number of lock requests for access to the data in the database system by the application;

compare the number of lock requests with a pre-determined value; and

when the number of lock requests equals the pre-determined value, request escalation of the lock state.

19-20. (Cancelled)

21. (Previously Presented) The database management system of claim 12, wherein the lock request is a request for a shared lock.

22. (Previously Presented) The database management system of claim 12, wherein the lock request is a request for an exclusive lock.

23. (Currently Amended) A computer readable medium encoded with a computer program for controlling concurrency of access to data in a database system, the computer program comprising computer executable instructions for:

partitioning a table in the database system into a plurality of partitions;

receiving a lock request for access to data in the database system, the lock request being a request for a page lock or a row lock for a corresponding row or page in the database system containing the data;

identifying a partition of the plurality of partitions that contains the row or the page in the database system containing the data;

associating the lock request with a partition lock on the partition that contains the row or the page in the database system containing the data, the partition lock locking the partition at a lock state that permits serialized access to data in the partition; and

serially accessing the data in the partition using the partition lock.

24. (Previously Presented) The computer readable medium of claim 23, wherein the computer program further comprises computer executable instructions for:

accessing the data without using the partition lock responsive to the data being committed at a time of receiving the lock request.

25. (Currently Amended) The computer readable medium of claim 23, wherein the ~~computer executable instructions for accessing the data using the partition lock include computer executable instructions for serializing access to the partition at a~~ lock state protects ~~to protect~~ against interference in the form of updates to the partition.

26. (Currently Amended) The computer readable medium of claim 25, wherein the computer executable instructions for ~~serializing access to~~ serially accessing the data in the partition include computer executable instructions for permitting lock requests access to the partition that are compatible with the lock state.

27. (Currently Amended) The computer readable medium of claim 23, wherein the computer executable instructions for serially accessing the data using the partition lock include computer executable instructions for having an application access the data through a single database system.

28. (Currently Amended) The computer readable medium of claim 23, wherein the computer executable instructions for serially accessing the data using the partition lock include computer executable instructions for having a second database system in a data-sharing environment access the data.

29-30. (Cancelled)

31. (Previously Presented) The computer readable medium of claim 23, wherein the lock request is a request for a shared lock.

32. (Previously Presented) The computer readable medium of claim 23, wherein the lock request is a request for an exclusive lock.

33. (Previously Presented) The computer readable medium of claim 26, wherein the computer program further includes computer executable instructions for:

receiving a lockmax value;

accumulating for an application, a number of lock requests for access to the data in the database system by the application;

comparing the number of lock requests with the lockmax value; and

when the number of lock requests equals the lockmax value, escalating the lock state.